REMARKS/ARGUMENTS

Claims 1-9 are pending herein. Claim 8 has been amended as supported by Figs. 10A, 10B, 15 and 17 of the present application, for example. Claim 9 has been amended in light of the amendments made to claim 8. Claims 1-7 stand withdrawn. Applicants respectfully submit that no new matter has been added.

Claims 8 and 9 were rejected under §103(a) over Sasaki in view of Fashii [sic, Fushii]. To the extent that this rejection may be applied against the amended claims, it is respectfully traversed.

Amended claim 8 recites a heat spreader module comprising active hard brazing materials each containing Ti, between the pedestal, a heat spreader member, an insulating board, and a metal plate. The pedestal, the heat spreader member, the insulating board, and the metal plate are pressed and heated, thereby joining the pedestal, the heat spreader member, the insulating board, and the metal plate together. Each of the active hard brazing materials are one of (i) Ag-Cu-In-Ti and (ii) a mixture of hard brazing material of Ag-Cu-In and Ti. Each of said active hard brazing materials are supplied in an amount ranging from 4.85 to 19.4 mg/cm^2, the active element of the active hard brazing materials being contained in an amount from 426.8 to 1358 $\mu g/cm^2$. The metal plate includes a marginal edge of alloy extending inward from a distal side edge of the metal plate distance no greater than 200 μm. The marginal edge of alloy is created by an amount of said active hard brazing materials squeezed out beyond the distal side edge of the metal plate. The heat spreader module has a thermal conductivity of 150 W/mK or greater.

Sasaki and Fushii fail to disclose the active hard brazing materials recited in claim 8 of the present application. Specifically, Sasaki discloses in column 17, lines 54-67, that In is possibly used as a component in a low-melting metallizing layer including at least one of Ni, Fe, and Cu. Sasaki in no way discloses or suggests that In can or should be used with Ag and/or Cu as part of a brazing material layer. Similarly, Fushii fails to disclose or suggest any hard brazing materials including the element In.

Further, Sasaki and Fushii fail to disclose or suggest the recited amounts of hard brazing material, which are necessary for the creation of a marginal edge of alloy extending inward from a distal side edge of the metal plate. The Examiner is respectfully requested to review Figs. 10A and 10B from the present application and shown below for reference.

FIG. 10A

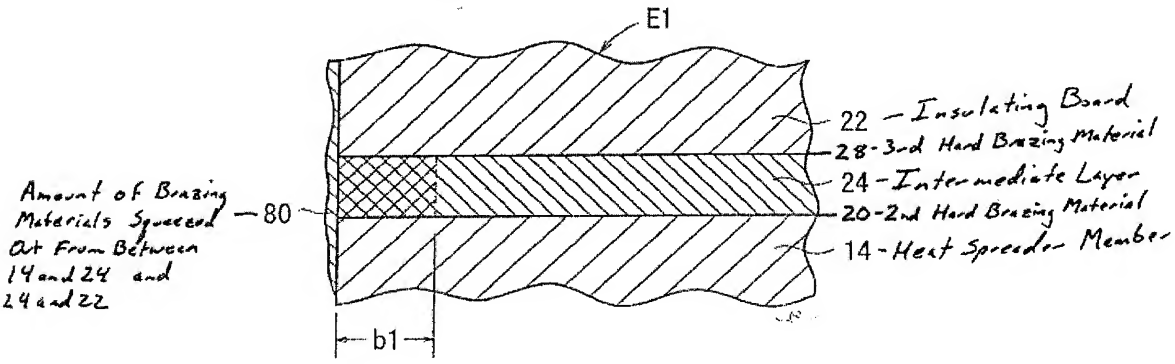
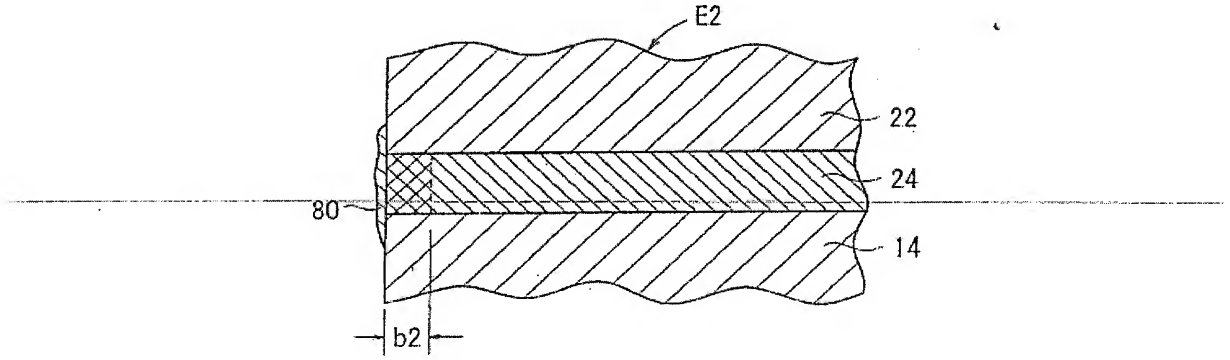


FIG. 10B



The Examiner is respectfully requested to note that the amount of excess brazing material 80 squeezed out from between 14 and 24, and 24 and 22 is created by excess amounts of the second hard brazing material 20 and the third hard brazing material 28. With reference to both Figs. 10A and 10B, the Examiner is respectfully requested to note that the greater the amount of excess brazing materials 80 directly determines the distance that the marginal edge of alloy extends inward from the distal side edge of the

metal plate as designated by reference "b1" in Fig. 10A and "b2" in Fig. 10B. Figs. 15 and 17 of the present application emphasize the criticality of the recited values by indicating when the sample amount of hard brazing material is excessive, creating too deep of a marginal edge of alloy in the metal plate. Both Sasaki and Fushii fail to acknowledge that such a marginal edge of alloy exists, and both clearly provide no teaching that the amounts of active hard brazing materials can or should be manipulated to control an amount of a marginal edge of alloy created in adjoining metal plates.

In light of the foregoing, the heat spreader module recited in claim 8 of the present application would not have been obvious to one skilled in the art provided with the disclosures of Sasaki and Fushii. Specifically, Sasaki and Fushii fail to disclose or suggest a heat spreader module comprising active hard brazing materials, each being one of (i) Ag-Cu-In-Ti and (ii) a mixture of hard brazing material of Ag-Cu-In and Ti, as recited in claim 8. Further, Sasaki and Fushii fail to disclose or suggest a metal plate including a marginal edge of alloy extending inward from a distal side edge of the metal plate a distance no greater than 200 μm, the marginal edge of alloy being created by an amount of the active hard brazing material squeezed out beyond said distal end of the metal plate, as recited in claim 8. Because Sasaki and Fushii fail to disclose or suggest the presence or creation of a marginal edge of alloy, Sasaki and Fushii also fail to disclose or suggest the amounts of hard brazing materials and active elements recited in claim 8, which result in the recited marginal edge of alloy. Since claim 9 depends directly from claim 8, claim 9 is also believed to be allowable over the applied prior art. Accordingly, reconsideration and withdrawal of the present rejection are respectfully requested.

For at least the foregoing reasons, Applicants respectfully submit that all pending claims herein define patentable subject matter over the art of record. Accordingly, the Examiner is requested to issue a Notice of Allowance for this application in due course.

If the Examiner believes that contact with Applicants' attorney would be advantageous toward the disposition of this case, the Examiner is herein requested to call Applicants' attorney at the phone number noted below.

The Commissioner is hereby authorized to charge any additional fees associated with this communication or credit any overpayment to Deposit Account No. 50-1446.

Respectfully submitted,

November 21, 2007
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